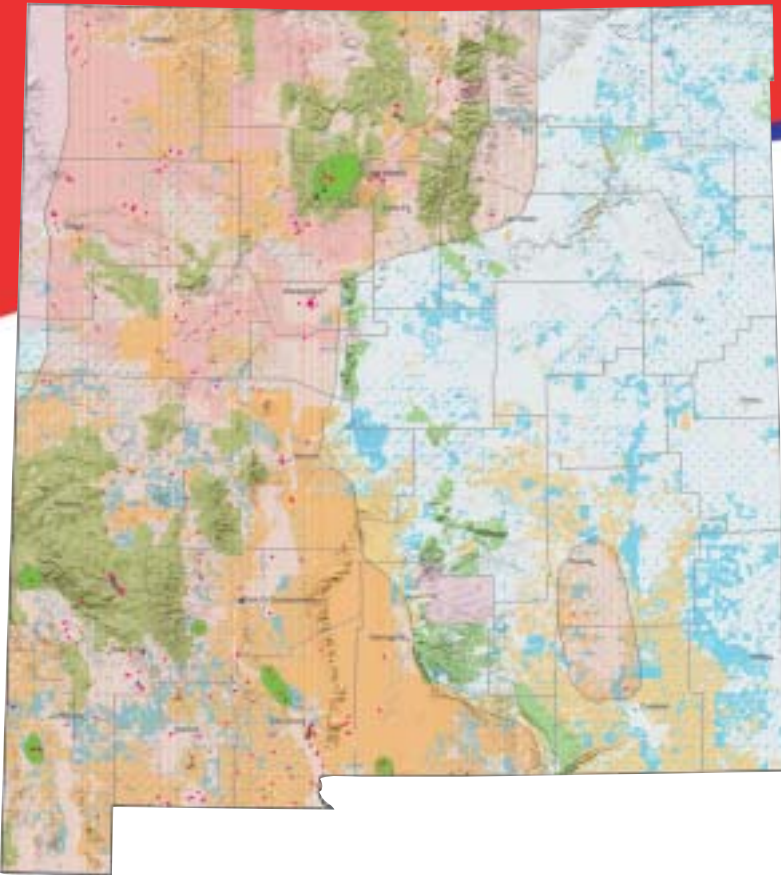


GEO THERMAL ENERGY

heat from the earth



New Mexico

New Mexico holds considerable reserves of this clean, reliable form of energy that to date have barely been tapped. New Mexico has more acres of geothermally heated greenhouses than any other state, and aquaculture, or fish farming, is a burgeoning enterprise for state residents. Several electric power generation opportunities also have been identified.

Why Geothermal ?

Homegrown Energy

It's here, right beneath our feet! No need to import!

Current Development

New Mexico is a leader in using the Earth's energy for space heating, having many direct-use facilities where low- to moderate-temperature geothermal resources provide heat for greenhouses, fish hatcheries, swimming pools, and therapeutic baths at spas and resorts. A large district heating system has provided space heat and domestic hot water to a portion of New Mexico State University at Las Cruces for many years. To date, New Mexico has one geothermal electric power plant, a 500-kWe binary unit supplying electricity to a large,

geothermally heated greenhouse. Geologists have identified several other attractive prospects, particularly the Jemez Mountains in the north-central part of the state, that could support more than 20 MWe of power.

Economic Benefits

Gross receipts from more than 50 acres of geothermal greenhouses in New Mexico exceed \$30 million annually, and from 6 to 12 people are employed per acre at these greenhouses. DOE invests about \$5 million of research and development funds annually in the state, primarily at its Sandia National Laboratories in Albuquerque, to promote wider use of our valuable geothermal resources.

Technical Capabilities

Universities, Federal and state agencies, and industry bring outstanding technical capabilities to the task of developing New Mexico's geothermal resources. New Mexico State University at Las Cruces possesses particular expertise in the field. Sandia National Laboratories is one of the three main National Laboratories working on geothermal R&D, employing more than 20 geoscientists, engineers, and technicians in its geothermal program.



New Mexico has more acres of geothermally heated greenhouses than any other state.



The Jemez Mountains - the hottest known geothermal resource in New Mexico.

History

Ten thousand years ago, North America Paleo-indians used geothermal hot springs for cleansing, cooking, healing, and even

negotiating. In the late 1800s, recreational spas were developed in Northern California and Yellowstone National Park.

Modern, non-resort use of geothermal energy in the West began in 1892 when Boise, Idaho, built its first district heating system. Today, the state capitol and many other Boise buildings are heated with this economical source of energy. In 1922, the first geothermal power plant came on line at The Geysers in Northern California. Commercial greenhouses began to use geothermal waters for irrigation and greenhouse heating in 1930. Geothermal fluids were used to enhance heap-leaching gold recovery in Nevada in 1987. In 1995, an onion- and garlic-dehydration facility was dedicated in Empire, Nevada. The plant produces more than 20 million tons of dried product per year. Mineral recovery (silica and zinc) from geothermal waters is currently being studied as an additional revenue stream from the Salton Sea geothermal power plant complex in Southern California.

Today, geothermal electricity is being produced in four Western states. Geothermal power and direct-use resources have been identified in 19 Western states. It is the goal of the Department of Energy's GeoPowering the West program that geothermally produced electricity will be generated in eight states by 2010, and that more than 5 million Western homes and businesses will use this abundant source of geothermal heat and power by 2015.



Geothermal energy offers substantial economic opportunities for New Mexico.

GeoPowering the West

GeoPowering the West is a cooperative Federal, state, and local effort to promote awareness of the vast geothermal energy resources in the Western United States, including Alaska and Hawaii. GeoPowering the West partners with businesses, government officials, Native American groups, utilities, and energy consumers to expand the use of geothermal energy. For further information on these efforts, please contact the following:

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